

DIVER IN DRESS, READY TO DESCEND

HE HISTORY of the pearl and pearl fisheries in America begins with the discovery of the western world by Columbus, who wrote glowing accounts to Queen Isabella of the beautiful necklaces and bracelets of pearls which he found the Indians of the Gulf of Paria and Cariaco in Venezuela wearing and which they so eagerly exchanged for broken bits of gaudily decorated Valencian plate. In the account of his third voyage in 1498 he wrote that on entering the Gulf of Paria "the natives came to the ship in countless numbers, many

of them wearing pieces of gold on their breasts and some with bracelets of pearls on their arms-which they in-

formed me were to be procured in their own neighborhood." As evidense of the truthfulness of his statements he sent the queen an immense pearl of exquisite orient. weighing over 300 grains, taken from these waters.

When Vasco Nunez de Balboa crossed the Isthmus of Panama in 1513, found the Indians along the shores of the Gulf of St. Michael (now the Bay of Panama) collecting pearls from oysters washed ashore durviolent storms, as well as diving for them a short distance from the

When Hernando Cortez in 1526 discovered Lower California he found the natives wearing many beautiful pearls from the waters of the Gulf of California. History tells us that when

Montezuma alighted from his regal palanquin. "blazing with burnished gold and overshadowed by a canopy of gaudy featherwork powdered with jewels and fringed with silver," to grant audience to Cortez, his cloak and goldensoled sandals were sprinkled with pearls and other precious jewels.

The pampered favorites of the rulers of Egypt and Rome valued their precious pearls from the Indies no more highly than did the Indian women of the Aztecs of Mexico or the Incas of Peru. When the king of Spain made Hernando de Soto governor of Cuba with com mission to conquer Florida the latter penetrated into the country of the Yuckees along the Savannah river in Florida to their chief village, Cufitatchiqui, where he found their queen wearing great strings of pearls. The queen in welcoming the Spanish explorer to the hospitalities of her nation even removed one of the most beautiful of her pearl necklaces and threw it around his neck.

Thus the Spaniards were not disappointed in their expectations of finding pearls among other treasure they sought to obtain from the natives of the new world, and such adventurers as Ponce de Leon, Panfilo de Navarez, Cabeca de Vaca, Hernando de Soto, Coronado, and numerous others were lured on by this

A member of Sir Walter Raleigh's expedicollected from the natives of Virginia over 5,000 pearls, of which he chose "as many as made a fayre chaine," and the Indians of the Mississippi wore bracelets and earrings of fine pearls, which, as Father Louis Hennepin "they gave us to understand they received in exchange for their calumets from natives inhabiting the coast of the great lake to the southward, which I take to be the Gulph of Florida."

For the sake of comparison of the principal pearl fisheries of the Americas with those of the old world, both as to wealth of production and methods employed, a short description of the oldest and richest fisheries in the world, those of Ceylon, is given. These are located in the Gulf of Manar, off the western shore of Ceylon and to the south of the island of Manar and on the Madras side near Tinnevelly. The Macedonians of Greece obtained pearls from the Persian Gulf and the Ptolemies' slaves worked the fisheries of the Red sea from where, undoubtedly, the famous pearl came that Cleopatra is supposed to have ground up and drunk in wine to her lover.

The old methods employed on the Ceylon fisheries and which continued up until a few years ago are the most interesting. The pearl oyster beds are under the supervision of government inspectors, who regulate the fishing. When a bed is to be fished over announcement of the fact is published beforehand, the season usually beginning the first part of March and continuing from four to six weeks, according

to the condition of the bed. Fishing boats and divers from the neighboring coasts of Malabar, native Indians, Malays, Arabs, Polynesians and pearl merchants by the thousands from all parts of India assemble shortly before the appointed day until as many as 25,000 people gathered on the fishing grounds. At midnight, when the wind freshens, the boats start for the banks in groups of 50 to 70, so as to arrive there before sunrise. Each boat carries from ten to twelve divers, who work in pairs, one diving while the other tends the signal line, and who relieve each other from time to time. At sunrise a signal gun is fired and the fishing begins. The diver usually carries a stone or other weight of about 50 pounds attached to the haul line to facilitate his rapid descent and in addition carries a basket made fast to the girdle about his waist in which he places the oysters as found. Some divers working in shallower water use no weight in descending, but while at work at the bottom make good use of both hands and feet to seize upon and wrench loose any oyster seen within the limited area over which they can work. The diver who works without diving apparatus and who is called a "head diver," working in from 35 to 45 feet of water, which is the average, can make from 40 to 50 descents in a moreing and can bring up from 15 to 30 oysters each trip. The native Indian, Malay and Polynesian divers remain under from 50 to 80 seconds, according to the depth at which they are working, but some can stand a much longer submergence.

DIVER IN DRESS DESCENDING TO THE PEARL BEDS

EARL OGO ISHFRIES

BOAT FOLLOWING THE WALKING DIVER, WHO IS NOW WALKING ALONG THE BOTTOM.

At the firing of another signal gun about noon the diving is suspended and the boats race ashore and beach, ready for unloading. On their arrival there the oysters are carried into the government corral and there piled into three heaps, each boat's load being kept separate, the government taking two heaps or two-thirds of the catch and the remainder being divided among the divers and the crew, the divers usually receiving the largest portion. There are about 4,500 divers at work, the daily catch averaging 1,000,000 oysters, which are often found clustered closely together.

The government's share is then auctioned off by the inspector in lots of 1,000 and usually bought up by small merchants, divided into smaller lots, and resold.

The true Indian diver never descends with out first providing for attack against sharks or other dangerous fish by invoking immunity through the shark charmer's incantations, a hereditary endowment among the East Indians, one of these charmers usually accompanying each boat. Aside from this danger, which in these waters, however, is comparatively small. the diver working under a tropical sun and exposed to rheumatism and often paralysis is usually a short-lived man.

Up until a few years ago this was the

Most of the diving is done by divers using the most improved diving apparatus, helmet Although it is now more than 130 ington Heights blockhouse, years since the allen troops occupied The couloment of the average of the average

Tryon and Marble Hill and the Wash-ington Heights blockhouse. sian companies, the Welsh Fusileers, the Third Scots Guards and the Sev-

Besides the many one-pound cannot balls used in the Hessian's field guns then known as the amusette, the excavators have found many of large caliber. One of them weighed forty eight pounds, and another thirty-two



CORRAL OF BRAZILIAN CATTLE, STATE OF JAO PAULO

out of every five pounds of coffee tries. These factories alone represent drunk in the United States comes from an investment of over \$40,000,000 and risk of being carried far from the boat on Brazil, and the proportion is growing are employing 50,000 workmen. rising in an exhausted condition, in the case steadily higher, principally because of the head diver, or of injury by being driven the Brazilian bean is of a superior quality and flavor. The generality mation on which the life line might catch fast. of coffee drinkers have a hazy idea king rope, twines and papers. There The divers take little or no food into their stom- that "Mocha" and "Java" enter largely achs before commencing work, as this would into the morning beverage, but it is a industries of various natures; vast eshinder deep breathing and make them more fact that all the Mocha and Java that tates that are devoted to the culture liable to cramps. A diver wearing 25 pounds of reach this country in a year would not

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and air pumps, and is carried on in from 40 to 120 feet of water, an average depth being 60 to 80 feet. The work can only be continued from 3 to 31/2 hours at a time, due to the tide, which along this coast has a maximum variation of over 20 feet, creating currents that make it impossible

to work for more than 11/2 hours before and

one-half to two hours after the turn of the tide.

One of the great dangers of working at the

bottom when a strong current is running is the

against some sharp jutting rock or coral for-

lead on each shoe, rubber garments and brass

helmet to which are attached air tubes, signal

great at 120 feet that he usually remains under

but 10 to 15 minutes, while in 50 feet of water

he might be seen moving about on the bottom

as large as those of Ceylon, but run from 6,000

Meleagrina of the Indian and south Pacific

oceans, varies in diameter from two to eight

inches, according to age, six inches being the

average. One diver working with helmet and

air pump can secure as many as 15,000 oysters

in a season. The greater part of the shell from

the La Paz fisheries is shipped to San Fran-

cisco, while most of the pearls go to Mexico City and Paris. In 1908 the production of these fish-

eries was valued at \$5,000,000, the pearls repre-

senting \$3,000,000 and the mother-of-pearl shell

According to Dr. George F. Kunz, one of the

world's greatest authorities on pearls, a pearl

of the first water should possess a perfect skin,

fine orient or delicate texture, be free from

specks or flaws, and be of a translucent white

color, with a subdued iridescent sheen. It

should also be perfectly spherical, or, if not, of

symmetrical pear shape. White or pink pearls

are the finest, owing to their delicate sheen.

Sometimes the outer layer can be removed, the

subjacent surface revealing a finer skin than

the outer one, and in this way a pearl may be

variety of shapes and color, round, pear shaped,

button pearl or flat on one side, baroque, or

pearl of irregular shape, and in color ranging

from white and pink to blue, green, brown and

black. Some very famous pearls of history have

With hardly an exception there are American

pearls among the crown jewels of every ruler of

Europe. In 1889, at the world's fair in Paris.

there was exhibited a set of seven black pearls

from these Mexican fisheries, valued at \$22,000

at that time, and today worth much more. One

of the largest pearls ever found here was sold

and the Spanish government presented Napo-

leon III. with a black Mexican pearl valued at

In Venezuela the principal oyster beds are

located around the island of Margarita, which

word in Spanish means pearl, and at Cubagua,

El Tirano, Gulf of Paria and Coro, Porlamar,

Maracapana and Macanao, so that this part of

Venezuela became known to the early Span-

island is the largest of the group. The only

village of any size among these Islands is San

Miguel, as old as the fisheries themselves, the

tower of its little masonry church being thickly

inlaid with beautiful nacreous shells from the

the fresh-water pearls, which are produced prin-

cipally by the Unio, a species of mussel com-

the country, although a pearl may be found in

any mollusk having a nacreous interior lining.

market from almost every state in the Union and

Canada, principally from Ohio, Indiana, Illinois,

Kentucky, Missouri, Arkansas, Michigan, Minne-

From the United States and Canada come

on to all the mountain streams throughout

Pearls have been brought to the New York

Of the Pearl Islands of Panama bay, Rey

Paris to the emperor of Austria for \$10,000.

been taken from these waters

lards as the Pearl coast.

fishing grounds on all sides.

sota, Tennessee and Mississippi.

\$25,000.

The Lower California pearls are of a great

The pearl shells from these waters are not

The true pearl oyster, the

O CANALS IN WHICH THE YOUNG OXSTERS ARE RAISED ...

for several hours.

to 7,000 to the ton.

method employed in gath-

ering pearls, and the Brit-

ish government of India

derived a revenue of from

\$300,000 to \$750,000 annu-

ally from the product of

these fisheries, but for the

last few years they have

been operated by an Eng-

lish corporation under a 20-year lease for a

stipulated sum per year, in addition to the

proper care and cultivation of the beds under

finest orient and color come from these waters

and the mother-of-pearl shell is the largest

and most iridescent. It was from here that

La Pellegrina came, said to be the finest and

most perfect pearl in existence and which

weighs 112 grains, as well as most of the

crown pearls of European royalty. For cen-

turies the Indian princes have amassed great

wealth in pearls and those of the Rana of

the world are situated on the northern and

The most extensive pearl oyster grounds of

The richest pearl fisheries in the Americas

at the present time are those of the Gulf of

California, centering around La Paz and along

the outer coast of Lower California in Mexico.

These fisheries were discovered by Hernando

Cortez when he marched across Mexico in

1526. The principal beds are near La Paz, in

the Gulf, Espiritu Santo, Lorenzo Point, off

lege bay, and, in fact, along the entire west

coast of the Gulf of La Paz to above the island

of Loreto and Tiburon, on the east side. In

addition to those found along the outside coast

of Lower California, pearl oyster beds are

found at points along the southern coast of

the Indians to work the La Paz beds and to

give one-tenth of their catch to the church

and one-tenth to the crown. The beds were

soon depleted and later abandoned. Over fifty

years later, after having recuperated, fishing

was renewed, and it is said that a Spaniard

who later worked them took yearly from them

300 to 500 pounds of pearls, which he packed

head divers, only were employed, but on the

revival of the fisheries about this time mod-

ern diving apparatus was introduced and today

they are being worked under concession by

San Francisco firms, who employ from 800 to

1,200 men and a number of run schooners,

which collect the oysters from smaller boats

working on the beds and carry them to the

companies' sheds on shore, where they are

opened and the pearls found sorted by passing

them through small brass sieves of graded

In the gulf the season commences in July

and continues to October, but while along the

unprotected outer coast it commences earlier,

in March, it is terminated by the hurricanes

that sweep this coast in June.

Up to 30 years ago "buzos de cabeza," or

on mules and sold by the bushel.

Cortez and the Spanlards after him obliged

island of Cerrabro, Los Coyotes and Mu-

Dholpur were valued at \$7,500,000.

western coasts of Australia.

Mexico and Nicaragua.

Schorles than those of Ceylon. The pearls

world has never known richer pearl

government supervision.

WHITE DOTS SHOW THE LOCATION OF THE PRINCIPAL PEARL FISHERIES OF THE AMERICAS

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supply St. Louis for six months. It is generally known and undercord and life line can remain at the bottom from one-half to three hours, according to the depth fine Brazilian coffee comes from the into grape culture, and is turning out at which he is working. The pressure is so state of Sao Paulo in that country, and the statement that Sao Paulo, the lar in several countries. Agriculture richest state in the Brazilian Union, of a general nature has engaged the is "one vast coffee estate" has been attention of the residents of the state made so frequently that the general impression has gone abroad that little ise but coffee is produced in the state. It is true that Sao Paulo alone, last year, produced 1,716,000,000 pounds of coffee that had a value of \$140,000,000, and that this vast aggregate found its way outward through the greatest coffee port in the world, Santos; but it is also true that Sao Paulo has a host of other industries that are developing at a rate that is astonishing. It is in Sao Paulo that the great wheat growing concessions have been granted; it is from Sao Paulo that the enormous shipments to Europe of live cattle will be tains three hundred factories engaged

Washington.-Fully four and a half in a truly remarkable array of indus-

It is true that coffee is the staple, but these factories are turning out cotton and woolen fabrics; they are maare breweries, marble quarries, metal of rice, and square miles of territory that produce enormous quantities of fruits that are shipped in all direcwines that are becoming vastly poputo a greater degree in the last few years, and as a consequence the railways are extending in every direction throughout the state. As an indication of the volume of business transacter through the port of Santos it last year reached a grand total of five and a half million tons, which compares very favorably with the trade of Rio de Janeiro or Buenos Ayres, the two largest South American ports.

In great measure this progress is due to the far-sighted and patriotic efforts of those statesmen who have directed the destinies of the state, and it has been recently stated by a South American historian that the history of made; it is Sao Paulo that now main- the State of Sao Paulo was the history of all Brazil.

HONOR RESTED WITH AUTHOR

How the Late Popular Writer, O. Henry, Outwitted Unscrupulous

Editor. A friend of the late O. Henry writes of him: "He was reckless in spending money, and frequently gave elevator boys and bellboys \$5 and \$10 notes. But he wasn't 'easy,' despite his financial regardlessness. His friends narrated an incident showing the man's shrewdness. A magazine noted for 'slow pay,' they say, contracted with him for a three-part story, for which he was to receive fifteen hundred dollars. He got a five hundred dollar advance before starting to work, and when he turned in the second installment (none of it had been printed yet) got five hundred dollars more, and asked for the third five hundred dollars as an advance before finishing the tale. The editor, in an effort to save money, apparently, declared that, after all, the story didn't appear to be worth more than one thousand dollars-this when he had the two installments in his office. 'All right,' said O. Henry. 'I won't write the third one then.' And he didn't. He laughed at the editor. 'Well then, said the latter, 'I'll run the two parts and then let our readers have a guess ing contest as to how the story endsand put up, perhaps, a five hundred prize to the winner.' For a moment the author thought he was outwitted Then he said: 'Go ahead-and I'll win

the prize.' He intended to win it, too.' An Office Business Only.

A young man called at the office of justice of the peace and with some hesitation made known his business which was to be married. The justice replied that he thought he could perform the service, and asked if the

young man had his license. 'Yes, sir," the youth replied. "Well, where is the young lady?" "She-she's at her father's." "Well, bring her here."

"She'd rather be married at hon squire. "And you expect me to go there and

narry you?" "Yes, air if you please "Young man," said the justice, "this office of mine is like a department

We sell matches here, but we store. don't deliver them at the house." Youth's Companion. Blightly Confused.

Marie was making her first visit to the beach. She was fearless of the water, and spent as much of her time in bathing as she was allowed. One morning there was an unusually strong undertow, and many of the bathers spoke of it. Marie, hearing them, stowed away the new phrase in her mind.

When she came in from her bath, she told how fine the water was, and told of the fun she had had. Then, assuming her grown-up manner, she remarked: "Oh, but the undertaker was strong this morning!"

Profited by Their Dreams. Mrs. Radeliffe confessed that some of the most thrilling incidents in the 'Mysteries of Udolpho" were inspired by nightmares produced by suppling on pork chops. Tartini, the great vio linist, after dining indiscreetly, dreamed that he had made a bargain linist, with the devil for his soul. To prove his powers the evil one seized a vio-lin and played a sonata of exquisite beauty. Tartini awoke with the muale ringing in his ears, committed the music to paper and pulsished it as "The Devil's Sonata."

His Real Calling. There is a writer in New York who has achieved little success, but who, being amply supplied with worldly goods, refuses to be discouraged. So he keeps turning out books the merits of which he earnestly attests by word of mouth and heavy purchases from the publishers. He is a long time friend of Simeon Ford, boniface, wit and philosopher. That Mr. Ford is the only one who ever read all of his

friend's books probably furnishes a

reason why the attentuated hotel man

is one of the most solemn looking of humans. They were at dinner recently when the author said: "Sim, you've been awfully kind to me-you are my real audience, for you've suffered like a friend and read all I have written. Sometimes I think that I have made a great mistake and i

author after all." "I think you're right," assented Mr. Ford. "You're a born chemist."

"How's that?" suspiciously asked the author. "Well," remarked Simeon, "every book you write becomes a drug on the

market." Putting It Up to Uncle.

Henry G. Brooks, the well-known New York lawyer, talking about domestic troubles, has had his share of the servant problem, though he won't admit it. However, he is frank enough to tell one on himself, as he did recently at the Waldorf-Astoric.

"We have a mighty good girl who got word that her uncle was very ill, She asked to be allowed to go away for a few days and go to the funeral. After a week had passed we commenced to get nervous. So a note was sent to her inquiring when she would be able to return and how her uncle was.

"We got a reply something like this: "'Dear Sir: I will be back as soon as possible. Uncle is getting weaker and weaker. Ma has told him I can't stay here much longer, and I know he don't want me to lose my job.' '

To adorn ourselves seems to be A part of our nature, and this desire seems to be everywhere and in every thing. I have sometimes thought that the desire for beauty covers the earth with flowers, paints the wings of moths, tints the chamber of the shell and gives the bird its plurouge and its song. O, daughters and wives, if you would be loved, adorn yourselves; if you would be adored, be beautiful,-Robert G. Ingersoll.

Vanity of Life.

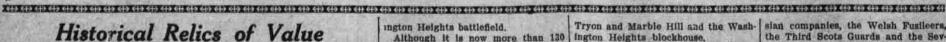
How small a portion of our life it is that we really enjoy. In youth we are looking forward to things that are to come. In old age we are looking backward to things that are gone past; in manhood, although we appear indeed to be more occupied in things that are present, even that is too often absorbed in vague determination to be vastly happy on some future day when

A Real Bohemian.

Scot-"A bohemian is a chap who porrows a dollar from you and then invites you to lunch with him." Mott-"Wrong. A bobemian is a fellow who invites himself to lunch with you and borrows a dollar."

The Platitudes of Acquaintance. An acquaintance is a being who

meets us with a smile and salute, who tells us with the same breath that he is glad and sorry for the most trivial good and ill that befalls us.-Hawkes-



Numerous Souvenirs of the Great | found in various parts of upper Man Revolution Recently Uncarthed in New York.

Dating back to the days when the

hattan will be placed on exhibition in the old Jumel mansion. The relicsshot, buttons, bayonets and various pieces of rusted metal, which at one time formed part of the equipment of the soldiers of King George III—were collected by Messrs, R. P. Bolton and W. L. Calver, amateur antiquarians, tish and Hessians camped on Washton Heights in New York, a large
W. L. Calver, amateur antiquarians,
section of relics which have been who live in the vicinity of the Washton Heights in New York, a large
who live in the vicinity of the Washton have been in the vicinity of Fort regiments included the various Hes-

the heights, all the relics found are in an excellent state of preservation. The various buttons used by the excavators, when cleaned, show the coats of arms and other insignia of the regiments to which those who wore them

The equipment of the excavators is most simple, consisting solely of two shovels, a garden fork and a large sleve. From old maps made by the American spies during the early days of the Revolution, and from those made by the British themselves, the two men located the sites where the

enty-sixth MacDonald Highlanders.

The bayonets, which are the most recent finds, were dug up two feet below the ground, near Inwood.